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EXAMINER

NGHIEM, MICHAEL P

ART UNIT PAPER NUMBER

2863

DATE MAILED: 08/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/919,701

Applicant(s)

STURGEON ET AL.

Examiner

Michael P Nghiem

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2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 13.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

The Amendment filed on May 19, 2003 has been acknowledged.

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 17-20 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 17, "... *removing* the first printhead from the carriage *while maintaining the ink reservoir in said secure position*" is not supported by the original specification.

According to page 3, lines 25-28, the carriage is held in the open position (position when reservoir is removed) to further facilitate removal of the printhead.

The remaining claims are also rejected under 35 U.S.C. 112, first paragraph, for being dependent upon a rejected base claim.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1-5, 8-16, 21-23, and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Miyazawa et al. (US 6,250,750).

Miyazawa et al. discloses all the claimed features of the invention including:

- an inkjet printer (column 1, lines 6-8) comprising:
- a chassis (body of printer);
- a motor (mechanism for moving carriage);
- a carriage (101) for an inkjet printer comprising:
  - a mounting portion (150);
  - a printhead (118) operably secured to said mounting portion (Figs. 12's);
  - an ink reservoir (120) pivotally secured to said mounting portion (Figs. 12c, 12d), said ink reservoir having an engaged position in which the ink reservoir is in fluid

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communication with said printhead when said ink reservoir is in said secured position (Fig. 12d), and an open position (Fig. 12b), in which the ink reservoir is pivoted away from said printhead such that said printhead may be accessed from above said mounting portion without removing said ink reservoir from said secured position (position in which 118 may be accessed from above);

- a plurality of ink reservoirs (120, 200); and a plurality of printheads (heads for each 120, 200);

- wherein one of each plurality of ink reservoirs is in fluid communication with a respective one of each plurality of printheads in said engaged position (Figs. 11, 12's);

- a channel (119) extending between said ink reservoir and said printhead in said engaged position (Fig. 12d);

- said channel is substantially air tight when said carriage is in said engaged position such that a vacuum formed in the channel will cause ink to flow (Fig. 12d), and said channel is not substantially air tight when the carriage is moved out of its engaged position, thereby preventing ink from flowing through the channel (Fig. 12b);

- said mounting portion includes:

- a printhead mounting-portion (bottom of 150);

- an ink reservoir mounting-portion (includes 115);

- said printhead mounting-portion is pivotally secured to said ink reservoir mounting-portion at a pivot point (Figs. 12's);

- said printhead is detachably secured to said printhead mounting-portion (Figs. 12's);

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- said ink reservoir is detachably secured to said ink reservoir mounting-portion (Figs. 12's);
- a resistive detent (106a) on one of said printhead mounting-portion and said ink reservoir mounting-portion (Figs. 12's);
- a tab (116) extending from the other of said printhead mounting-portion and said ink reservoir mounting-portion for operably engaging said resistive detent when said carriage is in said open position (Figs. 12's), thereby holding the carriage in said open position to further facilitate removal of the printhead (Figs. 12's);
- a shaft (117) extending from one of said printhead mounting-portion and said ink reservoir mounting-portion (Figs. 12's), said shaft having a mating end portion (106);
- a mating hole (opening of 106) for receiving said shaft in the other of said printhead mounting-portion and said ink reservoir mounting-portion (Fig. 12b), said mating hole including a notch for operably receiving said mating end portion of said shaft only when said printhead mounting-portion and said ink reservoir mounting-portion are in a defined position with respect to each other (Figs. 12's);
- a latching mechanism (112) for detachably securing said printhead mounting portion to said ink reservoir mounting-portion (Fig. 12d);
- said latching mechanism includes:
  - a handle (left handle of 112) pivotally secured to one of said printhead mounting-portion and said ink reservoir mounting-portion at a pivot (bottom convex of 112);
  - a joining arm (right portion of 112) extending from said handle;

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- a hook (notch engaging 105) for receiving said joining arm extending from the other of said printhead mounting-portion and said ink reservoir mounting-portion such that said hook operably engages said joining arm when said handle is pivoted about said pivot (Fig. 12d).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 7, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazawa et al. in view of Oda et al. (US 5,552,816).

Miyazawa et al. discloses all the claimed limitation as discussed above.

However, Miyazawa et al. does not disclose that said printhead is detachably secured to said printhead mounting-portion.

Nevertheless, Oda et al. discloses a printhead (H) being detachably secured to a printhead mounting-portion (C, Fig. 1) for the purpose of providing easy access to the printhead by a capping device.

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Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide Miyazawa et al. with a detachable printhead as disclosed by Oda et al. for the purpose of providing easy access to the printhead by a capping device.

### ***Response to Amendment***

4. The amendment filed on December 9, 2002 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Claim 17, "... *removing* the first printhead from the carriage *while maintaining the ink reservoir in said secure position*".

Applicant is required to cancel the new matter in the reply to this Office Action.

### ***Response to Arguments***

5. Applicant's arguments filed May 19, 2003 have been fully considered but they are not persuasive.

With respect to the 35 USC 112, first paragraph, rejections, Applicants argue that Figs. 9 and 13 show that the ink reservoir (24a) remains in its "secured position" on the ink



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reservoir mounting portion (50) even though the ink reservoir is no longer in its "engaged position" relative to the printhead.

Examiner's position is that Figs. 9 and 13 do not show the ink reservoir (24a) in its "secured position" on the ink reservoir mounting portion (50). The ink reservoir (24a) is not present in either of the figures. Fig. 9 shows the carriage in the "open position (60)" without the presence of the ink reservoir (24a).

With respect to the 35 USC 102 rejections, Applicants argue that Miyazawa does not teach allowing access to the printhead while the ink reservoir is in a secured position. There is no space to provide access to the printhead from below the carriage, much less allow for the installation or removal of the printhead through this area.

Examiner's position is that the printhead (118) may be accessed from below the carriage for maintenance purposes (e.g. accessed by a capping device).

Applicants further argue that Miyazawa does not teach allowing access to the printhead from above the carriage.

Examiner's position is that Miyazawa teaches allowing access to the printhead from above the carriage (Fig. 12b shows a position in which 118 may be accessed from above).

With respect to the 35 USC 103 rejection, Applicants argue that none of the references , alone or in combination, teach or suggest the elements of the present claims. Both

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Miyazawa and Oda do not teach accessing a printhead from above the carriage without first removing an ink reservoir.

Examiner's position is that Miyazawa teaches accessing a printhead (118) from above the carriage without first removing an ink reservoir (Fig. 12b).

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

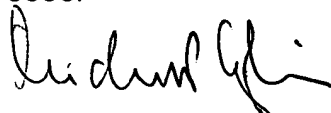
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***Contact Information***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (703) 306-3445. The examiner can normally be reached on M-H from 6:30AM – 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached at (703) 308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-5841 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



**MICHAEL NGHIEM**  
**PRIMARY EXAMINER**  
Michael Nghiem

August 8, 2003